West Coast Geographic Strategic Plan 2020-2023

NOAA FISHERIES

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A Message from our Leadership

Dear Friends and Colleagues:

We are excited to present the NOAA Fisheries West Coast Geographic Strategic Plan for 2020–2023. This plan highlights our goals for the next 4 years along with the strategies we will use to achieve them. We recognize that our region faces significant challenges for the resources we manage and support. This is our plan for doing our part to meet those challenges.

The Strategic Goals and Key Strategies outlined within this plan provide a small but important snapshot of our collective efforts to manage and conserve natural resources while also working to improve the regulatory environment. We will continue to focus our efforts on ensuring the productivity and sustainability of fisheries and fishing communities through science-based decision-making and compliance with laws and regulations, while performing the critical work necessary to recover and conserve protected resources.

The West Coast Regional Office, Northwest and Southwest Fisheries Science Centers, Office of Law Enforcement, and Restoration Center have a long history of successful collaborative efforts. NOAA Fisheries' offices on the West Coast have a well-earned reputation of achieving organizational excellence, conducting cutting-edge scientific research, and providing a diverse and inclusive workplace for our staff and partners. And while this strategic plan presents important information about NOAA Fisheries' vision for the future along the West Coast, it will ultimately be the hard work of our employees and affiliates, working on the ground domestically and internationally, that will get us where we need to be.

It is our privilege to have the opportunity to serve the people of NOAA Fisheries' West Coast Region—from the individuals who reside in our states, to the stakeholders, industries, and tribes with whom we interact every day. Our overarching goal to provide sustainable fisheries and conserve protected species while supporting healthy economies along the West Coast is the driving force for the work we do. We are committed to the value of service to our mission and the country. We recognize the important efforts and results of NOAA Fisheries that have positively impacted and affected the communities and the environments where we live and work. We look forward to continuing our efforts to improve the health of our environment and economy.

Barry Thom
Regional Administrator
West Coast Regional Office

Kevin Werner, Ph.D.
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Northwest Fisheries Science Center

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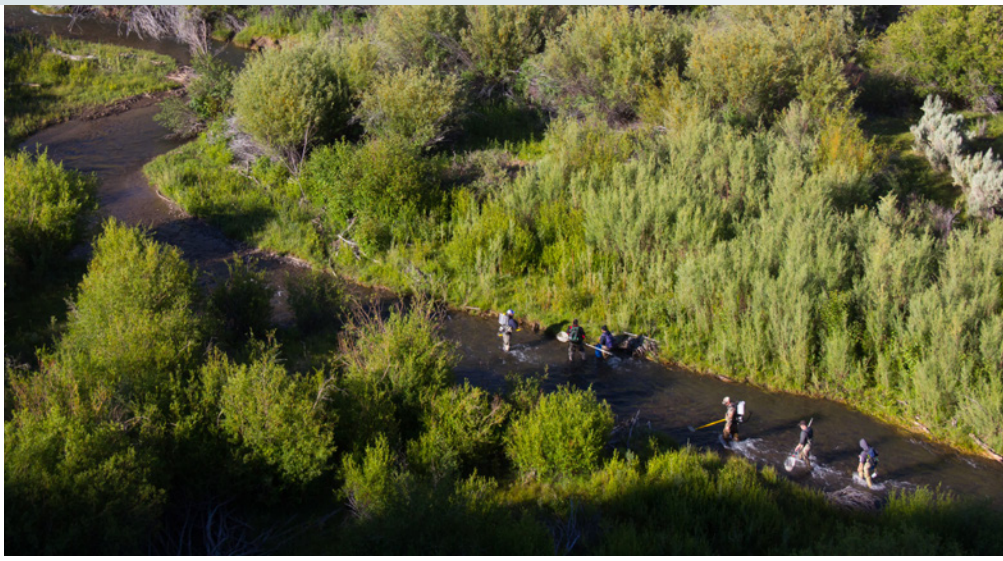
Mission and Mandates

The NOAA Fisheries enterprise along the West Coast is responsible for managing, protecting, and conserving marine and anadromous species and their habitats in inland, coastal, and offshore waters. Our research, fisheries management, enforcement, and habitat restoration programs work collaboratively to help preserve, recover, and protect habitat and at-risk species such as salmon, abalone, Southern Resident killer whales (SRKW), sea turtles, and Steller sea lions. NOAA Fisheries is one of several agencies within the Department of Commerce that work to ensure our coastal and ocean resources are sustainable and productive for generations to come. The West Coast Regional Office, Northwest Fisheries Science Center, and Southwest Fisheries Science Center of NOAA Fisheries work specifically on managing these resources and conducting the necessary science in Washington, Oregon, California, and Idaho. The regional office and two science centers also partner with NOAA Fisheries' Office of Law Enforcement, Restoration Center, and the Seafood Inspection Program to effectively meet their responsibilities. The NOAA Fisheries West Coast enterprise has also worked to develop strong interagency cooperation with other partners, such as the U.S. Fish and Wildlife Service and key state-level natural resource management agencies. These collective efforts ensure that our management decisions are based on the best available science and and supported by innovative technologies.

Our mandates and authorities are derived from numerous statutes, which include the Magnuson-Stevens Fishery Conservation and Management Act (MSA), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA). Along the West Coast, we manage the fisheries for salmon and steelhead, more than 90 species of groundfish, coastal pelagics such as anchovy and sardine, and highly migratory species such as billfish, sharks, and tunas. Our goals are to provide oversight and management for an economically healthy and sustainable fishing industry, effectively manage and conserve marine mammals, and promote the conservation and recovery of threatened and endangered species.

Our western region organizations operate under a unique relationship with tribal governments based on provisions of the U.S. Constitution, congressional legislation, treaties, Executive Orders, Secretarial Orders, and judicial decisions that recognize reserved rights of Native Americans to protect their property and their way of life. The relationship between federally recognized Indian tribes and the federal government is one of sovereign-to-sovereign and has been described at length by the federal judiciary and referred to in federal law promoting tribal self-determination and self-governance. There are more than 150 federally recognized tribes in the western region, along with many non-federally-recognized tribal partners and intertribal organizations. Many of these tribes have treaties reserving

their right to fish in "Usual and Accustomed" fishing places that include important marine and freshwater fish. These tribes work with NOAA Fisheries as co-managers of these resources with the states and federal government. They actively participate in management decisions, including those related to hatchery production, habitat conservation and restoration, hydropower, and fisheries harvest.



Electro-shocking juvenile Chinook salmon in Camas Creek, ID. Photo: Benjamin Sandford, Northwest Fisheries Science Center.

Our efforts to identify science-based solutions to challenging environmental issues have been supported through our joint efforts with other federal, state, local, and tribal governments, and various stakeholders. In addition to these groups, our staff works closely with the Pacific Fishery Management Council, Pacific States Marine Fisheries Commission, the fishing industry, and other stakeholders to ensure healthy fisheries population levels are achieved and maintained now and into the future. It is a true cooperative effort where we seek to grow domestic marine aquaculture production and provide for sustainable natural resources, while also protecting and conserving marine life and their habitats in the Pacific Ocean, Southern Ocean off Antarctica, and freshwater systems of Washington, Oregon, California, and Idaho. As a result of our team-based approach, NOAA Fisheries and our partners have found success by reducing the number of fish stocks impacted by overfishing and increasing the number of rebuilt stocks through the implementation of annual catch limits, stock rebuilding plans, and conservation and restoration activities in important habitats.

A vital part of our success has been through the support provided by NOAA Fisheries' Headquarters Office of Law Enforcement and its regional divisions. The Office of Law Enforcement's mission is to protect marine wildlife and habitat by enforcing domestic laws and supporting international treaty requirements designed to ensure global resources are available for future generations. Through their partnerships with the states and other federal agencies, their special agents and enforcement officers work along the West Coast and inland riverways to ensure compliance with the nation's marine resource laws. Their jurisdiction within the U.S. Exclusive Economic Zone covers more than 300,000 square miles of open ocean, almost 1,300 miles of coastline, and five of NOAA's National Marine Sanctuaries.

The health of marine species and habitats under our management is important for maintaining a balanced and thriving ocean ecosystem and supporting a prosperous ocean and coastal recreation sector. We work to conserve these resources, protect them from the negative impacts resulting from human activities, and monitor those activities that might potentially cause harm, as mandated by the MSA, ESA, and MMPA.

NOAA Fisheries' Headquarters Office of Law Enforcement and its regional divisions, in partnership with states, territories, and other federal agencies, conducts compliance assistance and enforcement activities to ensure the success of our regulatory efforts.

In partnership with industry and consumer groups, we work to increase consumer confidence in seafood by ensuring safe, wholesome, and properly labeled seafood through inspection, law enforcement, and international cooperation.

Strategic Goals

Reflecting the vision of the Department of Commerce and NOAA to *Help the American Economy Grow*, our three Strategic Goals for 2020–2023 are to:

- Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability.
- Conserve and recover protected species while supporting responsible fishing and resource development.
- Improve organizational excellence and regulatory efficiency.

Regional Fishery Management Councils

The Magnuson-Stevens Fishery Conservation and Management Act created eight regional fishery management councils. These councils are responsible for fisheries requiring conservation and management in their region. Voting and non-voting council members, supported by NOAA Fisheries, represent the commercial and recreational fishing sectors and environmental, academic, and government interests.

Under the MSA, councils are required to:

- Develop fishery management plans and recommend regulations to NMFS.
- Convene committees and advisory panels and conduct public meetings.
- Develop research priorities in conjunction with a Scientific and Statistical Committee.
- Select fishery management options.
- Recommend to NMFS annual catch limits based on best available science.
- Establish rebuilding plans.

NOAA Fisheries works closely with the councils to designate essential fish habitat for federally managed species, research and describe habitats essential for each life stage of many species, create maps, and designate Habitat Areas of Particular Concern.

The West Coast Regional Office, Northwest Fisheries Science Center, and Southwest Fisheries Science Center work closely with the Pacific Fishery Management Council.

Learn more about the Regional Fishery Management Councils.
https://www.fisheries.noaa.gov/topic/partners#regional-fishery-management-councils

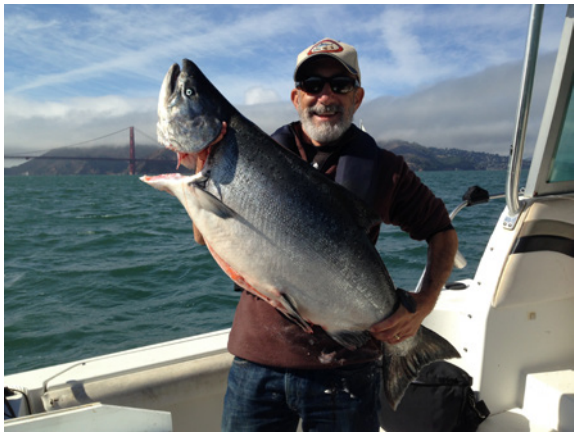
Organizations

Our West Coast Region enterprise includes more than 800 employees and affiliates who work tirelessly toward achieving these three strategic goals. We have:

West Coast Regional Office

The West Coast Regional Office provides science-based conservation and management for sustainable fisheries and aquaculture, marine mammals, sea turtles, and endangered species, and their habitats. The Regional Office consists of:

- **Regional Administrator's Office:** The RAO establishes WCR policies, procedures, principles, and priorities, and oversees and coordinates several cross-division activities, such as communications, aquaculture, and National Environmental Policy Act review that requires coordination among multiple offices and locations throughout the WCR.
- **Sustainable Fisheries Division:** The division is responsible for conservation of fishery resources, eliminating overfishing, rebuilding overfished populations, maintaining healthy commercial and recreational fisheries, creating long-term economic and social benefits to the nation from living marine resources, and ensuring that harvest and hatchery decisions are consistent with the Federal government's Indian trust responsibilities and treaty obligations.
- **Protected Resources Division:** The division is responsible for the oversight, policy direction, guidance and coordination of management programs mandated by the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). We manage protected species along the West Coast. Recovery and conservation of ESA-listed fish species, like salmon, also support our sustainable fisheries goal by providing the long-term foundation for commercial, recreational, and tribal fisheries.
- **Operations, Management, and Information Services Division:** The division supports WCR operations through budget planning, formulation, and execution; human resources management (including Equal Employment Opportunity and diversity); oversight of administrative processes; management of information, information technology, and communications systems; and management of environmental compliance, travel, facilities, safety, and property.
- **Area Offices:** The WCR's four Area Offices—California Coastal, California Central Valley, Interior Columbia Basin, and Oregon and Washington Coastal—carry out integrated watershed-based approaches by focusing on the conservation of anadromous fish, their habitats, and the ecosystems on which they depend.
- **HQ Field Offices:** Additionally, NOAA Fisheries' Headquarters Office of Law Enforcement staffs 15 field offices in West Coast Region tasked with enforcing the domestic laws and international treaty requirements designed to protect marine life and their habitats. NOAA Fisheries' Headquarters Office of Habitat Conservation and their Restoration Center has six field offices in this region working on recovery of ESA-listed species through habitat restoration.



Northwest Fisheries Science Center

The NOAA Fisheries Northwest Fisheries Science Center works with the West Coast Region to manage more than 90 commercially important fish species, recover over 30 threatened and endangered fish and marine mammal species, and identify and mitigate coastal and ocean health risks. We also work with the Southwest Fisheries Science Center to inform management decisions on the stewardship of the California Current Large Marine Ecosystem. The Science Center consists of:

- **Office of the Science Director:** The Office of the Science Director provides overall leadership and coordination for the Center's science programs, oversees collaborative partnerships and manages small scientific programs in emerging areas including: Science Synthesis & Coordination, Communications, Autonomous Underwater Vehicle Program, and the NOAA Western Regional Collaboration Team.
- **Conservation Biology:** The division conducts science to support the conservation of marine species and the ecosystems including statistics, genetics, ecology, economics, anthropology, and population biology.
- **Environmental and Fisheries Science:** The division conducts research to assess and reduce natural and human-caused impacts on environmental and human health, and to improve methods for fisheries restoration and production in conservation hatcheries and in aquaculture. EFS also maintains a readiness to respond quickly to environmental emergencies from the release of toxic materials into the environment.
- **Fish Ecology Division:** The division helps resource managers and the public understand the ecological links between important fishery resources and their Pacific Northwest habitats. We conduct Ecosystem Analysis, Estuarine and Ocean Ecology, Migrational Behavior, and Watershed Science.
- **Fishery Resource Analysis and Monitoring:** The division collects and analyzes information on the approximately 90 groundfish species regulated under the Pacific Fishery Management Council's Groundfish Fishery Management Plan including conducting field surveys, debriefing observers, and analyzing samples for Economic and Social Science, Fisheries Observation Science, Groundfish Ecology, and Population Ecology.
- **Operations, Management and Information Division:** The Division provides administrative services and infrastructure to support the NWFSC's scientific programs including planning for programmatic and annual operations; scientific data management; center budget formulation and implementation; human resources management; administrative processes; information technology; environmental compliance and safety; and facilities management.

Humpback whale in San Francisco Bay near Alcatraz Island. Photo Dan Cheng, West Coast Regional Office.

Southwest Fisheries Science Center

The Science Center conducts marine biological, ecological and oceanographic research, observations and monitoring of living marine resources and their environment. Center scientists work with numerous partners and our NOAA Fisheries counterparts—the Northwest, Pacific Islands and Alaska Fisheries Science Centers and the West Coast Regional Office—to provide sound science for national and international management decisions. The Science Center consists of:

- **Director's Office:** The Director's Office manages and directs the overall activity of the NOAA Fisheries' Southwest Fisheries Science Center.
- **Antarctic Ecosystem Research Division:** The division manages the U.S. Antarctic Marine Living Resources Program, which provides information for U.S. policy on the management and conservation of Antarctic living resources and supports U.S. participation in international efforts to protect the Antarctic and its marine life.
- **Environmental Research Division:** The division focuses on the study of environmental influences on marine resources by providing oceanographic information to fishery scientists and managers, describing links between environmental processes and population dynamics of important fish stocks, developing means to forecast fish population availability and resilience to fishing pressure, and assessing the effects of global climate change on oceanic processes important to fish population dynamics.
- **Fisheries Ecology Division:** The division studies demersal and anadromous fish of the California Current and adjacent waters by conducting stock assessments for the management of groundfish and salmon fisheries, and providing scientific information to support conservation of threatened and endangered anadromous species.
- **Fisheries Resources Division:** The division assesses the biomass of valuable coastal pelagic fish stocks and evaluates biological and environmental factors that affect their distribution, abundance, and survival. The division also conducts basic fishery analysis and stock assessment research on tropical and temperate tunas, billfishes, and sharks.
- **Marine Mammal and Turtle Division:** The division promotes and conducts research that contributes to the conservation and management of U.S. and international populations of marine mammals and their critical habitats.
- **Operations, Management and Information Division:** The division provides support for programmatic and annual operations planning; budget formulation and execution; human resources management (including EEO and diversity); administrative processes, management information; and environmental compliance, safety and facilities management. Other functions include procurement, illustrative, library, publications, travel, grants, and all other administrative services in support of Southwest Fisheries Science Center employees.

Strategic Landscape

It is critical that we are strategic about prioritizing activities to achieve optimal performance. We must be prepared to take advantage of new technologies, seize opportunities to modernize our infrastructure, increase efficiencies, and streamline business processes. We must be strategic with a willingness to move in new directions, while choosing what must be phased out. This plan is tightly focused on addressing our highest priorities and is informed by the strategic landscape. These issues, challenges, and risks are considered in our annual priorities-setting process.

Some of the *Issues* we face:

- Changes in oceanic and coastal conditions (e.g., ocean acidification, ocean heat waves, sea level rise) that affect the population, sustainability, and distribution of marine species.
- Loss and degradation of freshwater, marine, and estuarine habitat region-wide.
- Increased volatility of environmental conditions (e.g., oceanic, coastal, terrestrial, and atmospheric) that affect species, fisheries, and communities.
- Increased demand for freshwater (e.g., agriculture, hydropower, municipal, and industrial needs) and the effects on anadromous species and nearshore habitat.
- Prevalence of toxics (e.g., endocrine disruptors, growth inhibitors, and carcinogens), garbage, and plastic waste that affect water quality and marine species' health.
- Shifting economics and diversification of the energy sector creating opportunities and the potential for impacts on habitat and fisheries (e.g., offshore energy production, decommissioning of hydropower).

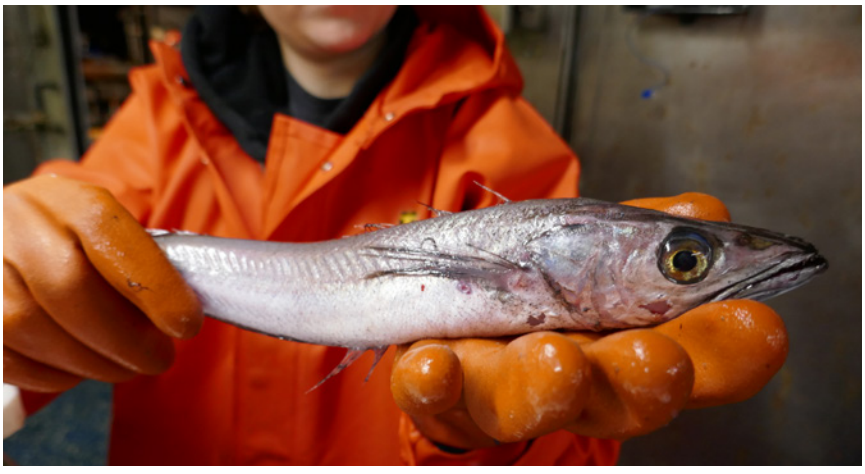
Some of the *Challenges* we must address:

- Maintaining an adequate level of surveys and population assessments for informed marine resource management.
- Meeting the increased needs for assessment data and modeling capabilities to support optimal catch levels and other management needs.
- Processing, storing, and disseminating increasingly large quantities of data.
- Integrating disparate fisheries data streams to streamline management processes and optimize decision-making.
- Increasing sustainable U.S. seafood production and reducing the seafood trade deficit.
- Addressing barriers to U.S. markets for U.S. seafood.
- Improving stability and opportunity in U.S. commercial and recreational fisheries.
- Ensuring that tribes do not bear a disproportionate burden in advancing protected species conservation, in recognition of tribal treaty rights and our tribal trust responsibilities.
- Advancing recovery efforts for Southern Resident killer whales, Pacific leatherback sea turtles, Sacramento winter-run Chinook salmon, Central California Coast coho salmon, and abalone.
- Reducing bycatch of non-target species while supporting commercial and recreational fisheries.

- Supporting the development of offshore energy resources while continuing to safeguard critical habitat (i.e., habitat needed to support recovery of listed species) and recovering species.
- Implementing Ecosystem-Based Fisheries Management.
- Minimizing pinniped predation impacts on at-risk fish populations while ensuring statutory protections for marine mammals.
- Effectively coordinating research and management with other federal agencies (e.g., Army Corps of Engineers, U.S. Geological Survey), governments (e.g., state and county agencies), and management bodies (e.g., Pacific Fishery Management Council).
- Balancing species recovery with sustainable harvests.
- Streamlining permitting for offshore aquaculture; working region-wide to promote sustainable aquaculture practices.
- Identifying how human activities impact both the landscape and the environment, and researching how to limit impacts to the extent possible.
- Working with property owners toward achieving species and habitat conservation on private land.
- Achieving regulatory efficiency in conducting ESA and Essential Fish Habitat (EFH) consultations, and effectively prioritizing workload to maximize conservation.
- Responding to the demand for timely permitting of large-scale infrastructure projects.
- Effectively optimizing limited resources for habitat restoration activities and related priority actions coast-wide.
- Maintaining or expanding dedicated research vessel time to ensure the availability of accurate data.
- Ensuring the highest level of information security to maintain confidentiality, integrity, and availability of information and data products/platforms.
- Recruiting and retaining a skilled workforce that allows agencies to meet mission requirements.
- Advancing science while keeping up with mandated science.
- Balancing the challenges and requirements of the workforce, infrastructure, and budget.

Some of the *Risks* we foresee:

- Declining species and the uncertainty of a changing environment on habitat.
- Aging infrastructure and availability or dependability of vessels for data collection, including the impacts on safety, efficiency, and productivity.
- Increasing mandates and requirements that exceed the level of available staff or resources.
- Increasing demands for timely and accurate science despite a declining or static workforce.



Pacific Hake collected during FY 2017 Winter Hake Survey. Photo: Jeff Bash, Northwest Fisheries Science Center.

Meeting the Challenges

To address the identified challenges, we must invest in the people, programs, and technology platforms that most advance our highest priorities. This requires that we strategically sunset low-priority activities, products, or services. Our high-priority areas of focus highlighted in this plan are:

Maximize the economic yield of U.S. fisheries, enhancing the value of our fisheries to local fishing communities and the U.S. economy.

Reduce bycatch and entanglement through new gear technologies that enable fishing with minimal impacts on marine mammals, sea turtles, seabirds, and other species of marine wildlife.

Foster U.S. marine aquaculture to increase production of seafood, add American jobs, and reduce the seafood trade deficit.

Focus species recovery on the most at-risk ESA-listed species.

Focus science and improve stock assessments on priority stocks/species without reallocating resources away from successfully managed ones.

Evaluate the levels and frequency of stock assessments to ensure investments are determined by need.

Integrate ecosystem considerations into stock assessments, fishery management, and aquaculture.

Partner with federal and state agencies to address factors and management strategies under other agencies' authorities that are adversely affecting fisheries.

Partner with industry and academia to increase our data collection capacity through the use of additional platforms of opportunity.

Leverage emerging technologies, such as autonomous underwater vehicles (AUV) and unmanned aircraft systems (UAS), video and advanced sensor technologies, and electronic catch reporting to expand the collection and accessibility of data for improved science, management, and law enforcement.

Engage internationally to level the playing field in seafood trade; combat illegal, unreported, and unregulated (IUU) fishing to ensure sustainable fisheries for stocks that migrate beyond our Exclusive Economic Zone; and ensure U.S. fishing access to highly migratory species.

Use non-regulatory tools to protect and restore priority habitats supporting long-term sustainability of our fisheries and protected resources.

Strategic Goal 1: Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability

NOAA Fisheries expects to amplify the economic value of U.S. seafood production by optimizing commercial harvest, ensuring recreational opportunities, promoting marine aquaculture, and conserving and restoring habitat. Effective science-based management is essential to reaching optimum yield while preventing overfishing. U.S. fisheries are among the largest and most sustainable in the world, yet we maintain a $14 billion seafood trade deficit. Reducing this deficit requires strong science in fisheries and aquaculture management, and close partnership coordination with the regional fishery management councils, interstate marine fisheries commissions, states and tribal co-managers, and local organizations and stakeholders. Realizing the economic value of U.S. fisheries requires international engagement, sustainable management approaches, effective fishery enforcement, and comprehensive monitoring of fishing activities to ensure fair and legal trade practices.

Key Strategies

1.1 Manage stocks for optimum yield

- Rebuild overfished stocks, work to prevent overfishing, and find ways to increase the use of legally caught fish both in the United States and abroad where international agreements govern resource utilization.
- Explore opportunities for broadening commercial and recreational access to new, undeveloped, or underdeveloped fisheries through the use of innovative gear and technologies.
- Work collaboratively with the Pacific Fishery Management Council, international regional fisheries management organizations, and conservation groups to develop management procedures that conserve protected resources and enhance economic development, while providing sustainable commercial and recreational fishing opportunities.
- Protect and restore EFH, and engage in community-based habitat restoration efforts whenever practicable to advance productive fisheries on the West Coast (e.g., Fir Island Farm Tidal Restoration in Puget Sound, Washington; Southern Flow Corridor Landowner Preferred Alternative in Tillamook Bay, Oregon).
- Identify science-based management strategies that allow for expanded access to recreational and commercial fisheries resources.

1.2 Increase U.S. marine aquaculture production

- Create increased opportunities for responsible and sustainable aquaculture development and production on the West Coast.
- Streamline authorization and permitting processes where possible to reduce industry impacts.

- Advance aquaculture science for shellfish, finfish, and other species on the West Coast.
- Provide leadership on conservation and mitigation aquaculture activities coast-wide, such as restoration of white abalone and production of salmon and steelhead throughout the Columbia River Basin under the Mitchell Act.
- Provide advanced marine aquaculture science and technology in support of West Coast hatchery production.

1.3 Adequately assess all prioritized stocks and maintain information for currently assessed stocks

- Establish target stock assessment levels and strive to meet targets for priority stocks without compromising sustainable management of other stocks.
- Incorporate ecosystem considerations into management advice.
- Develop incentives for industry-based (commercial and recreational) data collection and reporting, in order to adequately assess all prioritized stocks.
- Maintain and work to expand cooperative research with industry.
- Reduce uncertainty in stock assessments so that forecasts are more precise.

1.4 Modernize fishery information collection, management, and dissemination systems, and enhance cooperative data collection and sharing

- Modernize and optimize data collection, storage, infrastructure, and dissemination processes for West Coast fisheries information and, where international agreements govern, support enhanced analysis and provide scientific input.
- Develop incentive-based approaches for commercial and recreational data collection and reporting for improving the ability to effectively manage stocks.
- Continue supporting collaborative efforts between the West Coast Regional Office, Northwest Fisheries Science Center, Southwest Fisheries Science Center, and Pacific Islands Fisheries Science Center; Pacific States Marine Fisheries Commission; and industry and other partners to enhance the collection of fisheries data.
- Use new and emerging technologies—such as unmanned and partially autonomous sampling technology—to improve data collection methods and reduce costs where possible.

1.5 Combat illegal, unreported, and unregulated (IUU) fishing and seafood fraud, and advance fair trade

- Continue U.S. leadership in international engagement on issues relevant to the West Coast in support of balanced trade, market accessibility, and regional competitiveness related to sustainable seafood production.
- Participate with international groups—such as the Inter-American Tropical Tuna Commission, Pacific Salmon Commission, International Pacific Halibut Commission, Pacific Whiting Joint Management Committee, and Commission for the Conservation of Antarctic Marine Living Resources—to promote opportunities for advancing science to support fair trade and sustainable utilization of seafood products.

- Work to develop efficient and effective international monitoring tools related to the seafood supply chain, detect seafood fraud and mislabeling, and enforce import regulations.
- Work cooperatively with state and federal agencies to conduct seafood inspections at ports of entry, and ensure compliance with Seafood Import Monitoring Program requirements.

1.6 Increase consumer confidence in the quality and safety of U.S. seafood

- Promote consumer confidence in the quality of domestic seafood production by providing timely information and services on the sustainability, quality, and safety of West Coast seafood products.
- Advance seafood safety and quality management practices as well as improved processing techniques and delivery to market by West Coast seafood producers

1.7 Assess and predict the impacts of environmental changes and human activities on fisheries and ecosystems

- Identify how environmental changes and human activities will affect fisheries and ecosystems along the West Coast and internationally, including Antarctica.
- Design and develop new and innovative management systems that are adaptive to change with the goal of maintaining economically viable and sustainable fisheries into the future.
- Develop life cycle models, forecasts, and other decision support tools to inform management decisions.
- Use approaches to ecosystem-based fisheries management techniques, retrospective analysis, and management strategy evaluation (e.g., scenario planning) in furtherance of these efforts.

Juvenile green sturgeon. Photo: Thomas Dulkin.

Strategic Goal 2: Conserve and recover protected species while supporting responsible fishing and resource development

NOAA Fisheries is responsible for recovering threatened or endangered marine species, and conserving and protecting marine mammals. Many of these species are key components of their ecosystems and have particular social and cultural importance. The focus is on recovery while using our understanding of limiting factors and threats to minimize conflict with infrastructure projects or other forms of economic growth. We will continue to improve the timeliness of our regulatory decisions and conservation outcomes when fishing and resource development projects interact with protected resources. Recovery of protected species would relieve constraints on development or other economically important projects.

Key Strategies

2.1 Stabilize highest priority protected species

- Stabilize the highest priority endangered species on the West Coast or internationally that are of relevance to the West Coast.
- Advance recovery efforts and promote conservation for the most at-risk ESA-listed species.
- Implement management actions specific to priority species based on the best available scientific information to address population and habitat limiting factors.
- Work to execute high-priority actions for species and habitat conservation identified in recovery plans by leveraging partnerships and resources.
- Continue to support federal tribal treaty and trust obligations, including maintaining enforcement patrols, outreach, and investigations to detect and deter the illegal take of species and harm to habitats protected under the ESA and MMPA.
- Support conservation and mitigation techniques to recover ESA-listed species on the West Coast.
- Continue management efforts for highest priority ESA-listed species through the NOAA Fisheries Species in the Spotlight initiative. Species in the Spotlight include Southern Resident killer whales, white abalone, Pacific leatherback sea turtles, Central California Coast coho salmon, and Sacramento River winter-run Chinook salmon.

2.2 Review and streamline permitting and authorization processes for energy development and national defense, while maximizing conservation outcomes

- Promote energy independence and economic growth by creating efficiencies in our environmental review processes, including implementing guidance and policies that support conservation on the West Coast and internationally while allowing for major infrastructure and energy projects important to our nation's energy independence, economy, and defense.

2.3 Minimize bycatch and entanglement of protected species while supporting fisheries

- Support sustainable fishing opportunities and aquaculture development by using an ecosystem-based fisheries management approach.
- Work to understand and minimize interactions with and mortality of protected species, and partner with external stakeholders—such as state, local, and tribal governments, the fishing industry, and academic and environmental organizations—to develop entanglement and bycatch prevention measures both domestically and internationally.

2.4 Address the challenge of balancing water management for protected species with other uses

- Collaborate with federal, state, and tribal partners to improve predictive water management for the purpose of accommodating protected species' requirements along with those of competing uses such as agriculture, municipalities, and hydropower.

2.5 Assess and predict how environmental changes, extremes, and human activities affect ecosystems, and design new management paradigms in support of conservation and recovery

- Using state-of-the-art science, evaluate the impacts of acute events (e.g., extreme weather, environmental catastrophes) and how they affect protected resources and their ecosystems in both the short and long term.
- Develop adaptive and dynamic management approaches to efficiently respond to climate-driven ecosystem disturbances.
- Reintroduce species to historic habitats where necessary to build resilience to changing conditions and environments.
- Assess damage to habitat and restore where possible to regain ecological functions for protected species.
- Build and promote non-regulatory partnerships to develop innovative ways to advance conservation and recovery while supporting responsible fishing and resource management.

Strategic Goal 3: Improve organizational excellence and regulatory efficiency

To realize the first two strategic goals, NOAA Fisheries must be an effective and efficient organization with the agility to adapt and evolve to meet emerging challenges. Promoting organizational excellence is a continuous process to improve our ability to fulfill our mission, support our people, and support the organization. The key factors that determine organizational excellence include our people, our business and management processes, and our technology and infrastructure. Improving business processes and implementing best practices conducted in a priority-based environment, along with continuous regulatory reform, will ensure our operations best support our customers and partners.

Key Strategies

3.1 Match a diverse workforce to mission needs

- Recruit and strategically deploy a diverse and inclusive workforce to ensure flexibility in meeting West Coast mission needs and constituent engagement.
- Take necessary steps to ensure the continuity of operations.
- Prioritize the training and development of employees to help guard against workforce erosion and detrimental impacts on our capacity and capability.
- Partner with academic institutions to identify, develop, and recruit the next generation of West Coast scientists, managers, and team members.
- Identify new and innovative approaches to promote employee engagement and foster an inclusive and safe workplace for all employees.

3.2 Recapitalize infrastructure and facilities

- Conduct facility condition assessments annually to support the evaluation and maintenance of West Coast facilities and properties.
- Prioritize and address critical maintenance needs in a timely manner.
- Evaluate the West Coast facility and infrastructure needs for workspace to meet the needs of a changing workforce and distributed customer base.
- Identify and propose strategies for recapitalization to NOAA and the Department of Commerce.

3.3 Institutionalize prioritization and performance management practices

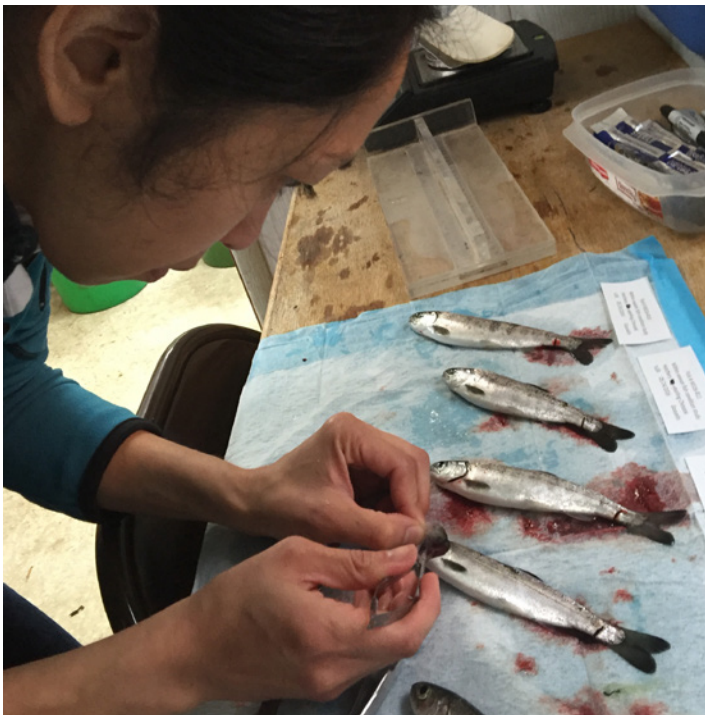
- Use priority-based methodologies to optimize investments for maximum economic return while meeting conservation mandates.
- Evaluate organizational performance, assess programmatic and operational risks, and assess opportunities to ensure the best value for the American public.

3.4 Review agency regulations and remove or modify rules that unnecessarily burden businesses and economic growth

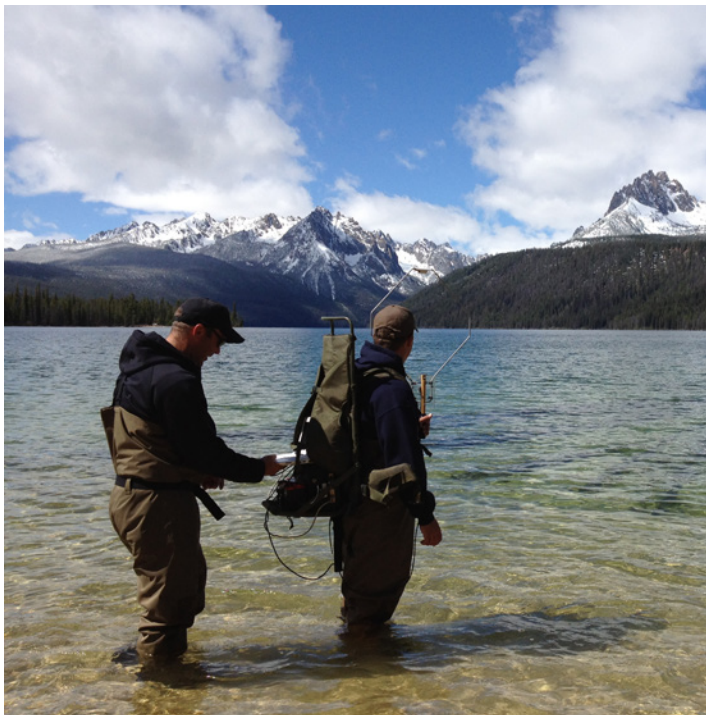
- Implement Executive Order 13771 by reviewing regulations to identify and modify or repeal rules that are outdated, unnecessary, or ineffective.
- Work with the Pacific Fishery Management Council and other stakeholders to help identify regulations that may unduly or unreasonably limit economic development and growth while providing limited conservation benefits.
- Assess potential flexibilities available to regulated entities that will maximize fishing opportunities while continuing to meet conservation mandates as they apply to West Coast species and the habitat on which they depend.

3.5 Institutionalize the use of innovative technologies

- Continue to develop new and emerging technologies (e.g., Environmental DNA research, AUV and UAS platforms, advanced sensors, molecular genetics, digital platforms, electronic reporting/monitoring, mobile applications, and cloud computing) for conducting surveys, enhancing and improving the accuracy of observing systems, and collecting and sharing data in cost-effective, transparent, and real-time approaches.
- Work with industry, academia, and other partners to test, deploy, and use these technologies.
- Continue Antarctic research work as a test bed for innovative technologies in the United States.



Jennifer Gosselin sampling Chinook salmon juveniles for blood chemistry at Ice Harbor Dam. Photo: Benjamin Sandford, Northwest Fisheries Science Center.



Gordon Axel and Jesse Lamb use a mobile tracking antenna to search for radio-tagged juvenile sockeye salmon in Redfish Lake, Idaho. Photo: Matthew Nesbit, Northwest Fisheries Science Center.

U.S. Secretary of Commerce
Wilbur Ross

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